DOCUMENT RESUME

ED 188 829 RC 012 099

AUTHOR Wurster, Stanley R.
TITLE Ft. McDowell Indian Community Preschool Program.
PUB DATE Jun 80
NOTE 21p.: For a related document, see ED 173 015.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *American Indian Education: American Indian Reservations: American Indians: *Community Schools: Cultural Awareness: Early Childhood Education: Emotional Development: Family Counseling: Motor Development: *Parent Education: Parent Participation: Parent School Relationship: *Preschool Education: *Program Evaluation: *Reservation American Indians: School Community Relationship: Skill Development: Social Experience
IDENTIFIERS Fort McDowell Indian Reservation AZ: Yavapai (Tribe)

ABSTRACT

Focusing on special education needs of Indian youngsters and supportive services for parents and community, the main component of the Ft. McDowell Indian Community Preschool Program is the classroom and training activity designed to promote each child's maximum development. During this fifth project year, the preschool classroom laboratory has been expanded, inservice training conducted, and home visits with each child and parent held prior to the start of school. To further the preschool child's development, a program has been structured using Peabody Language Development and Lippencott Readiness Program materials. Parents have continued to be active as classroom aides, in workshops, in reassessment tribal and staff meetings, and the new Pre-School Parent Association. Objectives and activities related to outreach to parents, family counseling, curriculum development, and involvement of tribal elders and historian have been modified only when necessary. Data analysis indicated program effectiveness in contributing to or modifying behavior of the children in such skills as readiness, motor, language, and social relations. However, no effectiveness is indicated in modifying parent attitudes toward child rearing in the areas of creativity, frustration, control, play, and teaching-learning. Revisions and modifications are recommended for the preschool program. (AN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED188829

FT. MC DOWELL INDIAN COMMUNITY

PRESCHOOL PROGRAM

BY

STANLEY R. WURSTER, ED.D.

ARIZONA STATE UNIVERSTIY

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Dr. Stanley R. Wurster

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TEMPE, ARIZONA

June, 1980

RC 012099

TABLE OF CONTENTS

SECTION		PAGE
I	Introduction	1
	Goals and Objectives	1
II	Program Description	2
III	Data Analysis and Findings	5
	Denver Developmental Test	5
	Peabody Picture Vocabulary Test	6
	Northwestern Syntax Screening Test	7
	Davis Auditory Perception Scan	7
	Bryngelson Picture Articulation Test	8
	Peabody Individual Achievement Test	10
	Butler Evaluation Instrument	11
	Parent As A Teacher Questionnaire	13
	Parental Involvement	16
IV	Summary Comments	17

LIST OF TABLES

TABLE		PAGE
I	Pre and Post Test Comparisons For Preschool Participants on Denver Developmental and PPVT Tests.	6
II	Pre and Post Test Comparisons For Preschool Participants on Northwestern Syntax Screening Test (NSST), Davis Auditory Perception Scan (DAPS), and Bryngelson Picture Articulation Test (BPAT).	9
III	Pre and Post Test Comparisons For Kindergarten Participants on Peabody Individual Achievement Test (PIAT).	10
IV	Pre and Post Test Comparisons For Preschool Participants on Butler Test.	12
V	Pre and Post Test Comparisons of Parent Responses on PAAT.	15

FT. MCDOWELL INDIAN COMMUNITY
PRESCHOOL PROGRAM

SECTION I

INTRODUCTION

The young children of the Fort McDowell Indian Reservation are as eager to learn and experience life as all children. Their situation, however, is rather unique. Fort McDowell was decommissioned as an army fort in 1903 and the land was given by the government to the Mohaves, Apaches and Yavapais for use as a reservation. For unknown reasons many of the Mohave and Apaches left. The Yavapai tribe became divided. Ancient tribal customs have been lost along with the identity of the people. Although aware of modern child rearing practices and educational benefits, young parents tend to allow the small child to grow with little direction because the proper resources for providing for the children are unavailable.

There has been no educational facility on the reservation. Preschoolers have had to travel great distances to the nearest headstart program. Because of the crowded conditions Ft. McDowell children have not attended preschool. Kindergarten children also have had to commute a great distance. When these children begin first grade they most often have little formal, structured learning and no classroom or group experiences. Academic failure and dropouts are widespread among Indian children.

In recognition of this complex problem the Fort McDowell Indian Community established a preschool/kindergarten program on the reservation to provide children with a structured learning opportunity, encouraging and enhancing communication skills and promoting new experiences to increase learning capacity. This program was further expanded in 1977 to include parents and infants 0-3 years of age (Parent Infant Program).

The program was planned to provide parental participation designed to enhance child rearing skills, heighten problem solving abilities and enable them to work with their children as teachers.

Tribal elders were to be involved in providing historical material and demonstrating skills to increase pride in Indian heritage and maintain long-standing involvement in the educational process.

GOALS AND OBJECTIVES

The principal purpose of this project was to continue and strengthen the existing preschool program for children between the ages of prenatal and six years at Fort McDowell, Arizona, with discussion groups to include parents of these children and of younger children, who wanted to increase their knowledge of early child developmental needs.

The project in pursuing the above goal, sought to achieve the following specific objectives:

1. Children 0-3 years of age will demonstrate improved motor skills as measured by the Denver Developmental Scale, administered pre-post of the school year.

2. Children between the ages of three and six will demonstrate improved language ability as measured by the Peabody Picture Vocabulary Test, administered pre-post of the school year.

3. Children between the ages of three and six will demonstrate improved school readiness in language facility as measured by the Northwestern Syntax Screening Test, Davis Auditory Perception Test, and Bryngelson Picture Articulation Test, administered pre-post of the school year.

4. Children 5-6 years of age will demonstrate improved school readiness in math and reading recognition as measured by the Peabody Individual Achievement Test, administered pre-post of the school year.

5. Children between the ages of three and six will demonstrate improved social skills as measured by the Butler Evaluation Instrument, administered pre-post of the school year.

6. Parents of participating children will express more flexible attitudes towards parenting, as measured by the Parent As A Teacher Questionnaire, administered pre-post of the school year.

SECTION II

PROGRAM DESCRIPTION

This program designed by the Fort McDowell Indian Community was planned to include activities and experiences which would contribute to the development of young children, with specific attention to meeting the special education needs of Fort McDowell youngsters. The program was designed to provide supportive services for parents, families and tribal elders, as well as strengthen the Indian community through its relationship with the child center.

Five basic components were planned. The classroom and training activity was designed to promote each child's maximum development in all ages of functioning - intellectual, social, physical and emotional, and provide a training laboratory in which parents could interact with the children while advancing their own knowledge.

The structure of the children's daily schedule was flexible, allowing for leisurely transition between activities.

Both the kindergarten and pre-kindergarten classes operated on a five-day-a-week schedule. The two classrooms functioned in facilities constructed within the tribal building. The space provided was conducive to achievement of program objectives.

The pre-kindergarten and kindergarten schedules included the following:

Outside Activities: wheel toys, climber, sand play, water table

Inside Activities: puzzles, dolls, books, blocks and art activities

Group Time: puppets, songs, finger plays, matching games, and basic pre-reading and pre-writing activities

Snack Time: good nutrition stressed with fruit juice, raw vegetables, fresh fruit, or crackers

Story Time: record stories, felt board stories, as well as books by the teacher

Brief Outside Period: lunch set-up

Lunch: time to talk about new foods and saying please & thank you

Learning activities were organized to suit the individualistic, active and sensory-oriented child. The work-play period was the heart of the day's program. The indoor and outdoor periods offered opportunities such as:

1. Making choices and following them through.
2. To observe and clarify ideas about things, people, animals and relationships to the environment.
3. To increase understanding and use of language.
4. To develop, exercise and increase an attitude of curiosity and eagerness for learning.

The opportunities were quite extensive and are not listed in full in this report.

The classes were divided into three groups for reading readiness activities and reading workbook activities as prescribed the Lippincott and Peabody curriculum materials utilized.

In addition, a variety of field-trips scheduled provided the children with new experiences to benefit from. For example, children visited a fire station, zoo, and pet store.

Twenty-two (22) children participated in the preschool program; fifteen (15) participated in the pre-kindergarten class and seven (7) participated in the kindergarten class.

The second component was labeled "Outreach to Parents". This component included parents and others who were primary caretakers of infants, toddlers, and preschool aged children in discussion group/workshop activities.

A total of eight (8) activities were scheduled and included such things developmental needs of children, childbirth film, eight stages of development presented by a psychologist, and child discipline. Five of these activities were attended by 3 parents, one was attended by 7 parents and no parents attended two of the scheduled activities.

Parents of very young Ft. McDowell children (0-3 years) also had an opportunity to participate in a program entitled Parent Infant Program (PIP). These parents participated in home-visits, a playschool conducted weekly, parents education classes, and other parent activities offered in conjunction with the preschool program.

Eleven mothers were able to participate as mother helpers in the classroom throughout the year. Mothers of preschool children were employed full-time and this factor prevented their participation in the classroom during the day.

Family Counseling was the third component of the Fort McDowell preschool project. The tribal social worker worked on a referral basis. This individual was involved in counseling sessions with the family and in conferences with the school staff working as a team. The social worker was encouraged to attend preschool staff meetings and other related meetings. Counseling was offered as needed for family and individual problems to preschool families and the total community.

The fourth project component was the involvement of Tribal Elders and Historians. The children had opportunities to interact with tribal elders while attending their gatherings held at the tribal building. Tribal elders demonstrated crafts, language, etc. within the preschool classrooms. Yavapai language curriculum is presented within the classrooms by a teaching assistant who is a tribal member, and she engages tribal elders to assist in language presentations.

The fifth component was the development of culturally relevant curriculum materials. A teacher trainee is engaged in the development of curriculum relative to Indian heritage and culture. Also, funds were received late in the project year which enabled the project to purchase cultural artifacts from Indian tribes.

The first component was directed toward five of the six objectives indicating that the education of the children was the most essential.

SECTION III

DATA ANALYSIS AND FINDINGS

The effectiveness and impact of the various components of this project were evaluated utilizing the following instruments:

Denver Developmental Test
Peabody Picture Vocabulary Test
Northwestern Syntax Screening Test
Davis Auditory Perception SCAN
Bryngelson Picture Articulation Test
Peabody Individual Achievement Test
Butler Evaluation Instrument
Parent As A Teacher Questionnaire

The instruments indicated above were administered on a pre-post test basis. Pretest and post test means were compared by means of a correlated t-test and differences between these means were considered significantly different if $p < .05$. The .01 level of significance was also ascertained and where the mean differences exceeded $p < .01$ this lower level is reported.

DENVER DEVELOPMENTAL TEST:

Analysis of the Denver Developmental Test data for 0-3 year old participants indicated the project was not successful in contributing to the improvement of the motor skills of these participants.

The Denver tests were scored by considering those tasks that each child should be able to accomplish at his/her age level. A total of 100 points was possible and the points awarded was determined by multiplying the percentage of those tasks completed that should have been completed for the child's age level by 100. Thus, the score also reflects the percentage of tasks completed.

A total of five (5) of the children 0-3 years of age had both pre and post test scores available for analysis. This group of subjects had a mean score on the pretest of 84 and a mean score of 85 on the post test. This gain of 1 point between pretest and post test was not significant ($p > .05$). (See Table I).

It can be concluded from the data analysis that the activities of the project did not contribute to a significant change in the level of motor skill development of the 0-3 year old project participants. (See objective 1 previously stated).

It is recommended that the project continue to provide those activities indicated to be effective in fostering motor skill development in these young participants. It is also recommended that the Denver Developmental Test be used to assess motor skill development in the new project year. Finally, since pretest scores were available for eighteen (18) children 0-3 years of age but only five (5) were available for post testing the loss of subjects was excessive. It would be advantageous to administer the Denver Developmental Test to PIP participants at anytime it is known they will no longer be participating in the project. In this way a better estimate of project impact can be ascertained.

PEABODY PICTURE VOCABULARY TEST:

Analysis of the Peabody Picture Vocabulary Test (PPVT) data indicated the project was successful in improving the language skills of the project participants.

A total of nineteen (19) preschoolers completed both the pretest and post test. The results of the data analysis indicated there was a significant difference between the group's performance on the pretest (41.1) and their performance on the post test (51.1) with improvement shown ($P < .01$). (See Table I).

When the pre-kindergarten participants were considered individually it was revealed that the twelve (12) subjects completing both pre and post tests made a significant gain (14.1) from pretest (33.2) to post test (47.3) ($p < .01$). (See Table I).

The older subjects (kindergarten) realized a gain of 3.1 points between pretest (54.6) and post test (57.7). This gain was statistically significant ($p < .01$). (See Table I).

It can be concluded from the data analysis that the activities of the project contributed significantly to the improvement of the language skills of the total group of preschool participants. This improvement was realized by the younger group and the older group (kindergarten). (See objective 2 previously stated).

It is recommended that those activities designed to improve the language ability of participants be continued and modified only when modifications promise to be better than existing activities.

TABLE I

PRE AND POST TEST COMPARISONS
FOR PRESCHOOL PARTICIPANTS ON
DENVER DEVELOPMENTAL, AND PPVT TESTS

INSTRUMENT	PRE-KINDERGARTEN	KINDERGARTEN	TOTAL GROUP
Denver Test	Pre M = 84 s = 18.5 Post M = 85 s = 12.1 t-ratio .205 change 1 N = 5		
PPVT Test	Pre M = 33.2 s = 12.2 Post M = 47.3 s = 9.9 t-ratio 7.419** change 14.1 N = 12	Pre M = 54.6 s = 2.4 Post M = 57.7 s = 2.1 t-ratio 4.095** change 3.1 N = 7	Pre M = 41.1 s = 14.2 Post M = 51.1 s = 9.4 t-ratio 5.820** change 10.0 N = 19

*Indicates significant difference between means - $p < .05$
**Indicates significant difference between means - $p < .01$

A speech-language consultant's findings provided documented evidence that the Ft. McDowell preschool children shared some speech and language deviations from the all-American norm. In an effort to incorporate language facility into the readiness skills of these children, the existing program was modified and Individual Educational Plans (IEP's) written for the children to meet recognized speech-language needs. Results of these efforts were assessed on a pre-post basis utilizing the Northwestern Syntax Screening Test, Davis Auditory Perception Scan, and Bryngelson Picture Articulation Test.

NORTHWESTERN SYNTAX SCREENING TEST:

The NSST instrument provides information for evaluation in the areas of receptive language and expressive language.

Data analysis relative to those skills above indicated there were significant differences between the pretest level and the post test level in both areas for the total group of preschoolers (N = 19). The group made significant gains from pretest to post test ($P < .01$) in receptive language and expressive language. (See Table II).

When the groups were analyzed individually the results indicated the pre-kindergarten group (N = 12) made significant gains from pre to post test in the areas of receptive and expressive language ($P < .01$). The kindergartners (N = 7) made significant gains in receptive language ($P < .05$) but not in expressive language ($P > .05$). (See Table II).

It can be concluded from the data analysis that the project was successful in contributing to the improvement of school readiness in receptive and expressive language facility of preschool participants. For the younger preschoolers this is true for both areas measured. For the older preschoolers contributions were evident in only receptive language facility. (See objective 3 previously stated).

It is recommended that efforts exerted toward improving receptive and expressive language facility be continued and activities incorporated into children's IEP's aimed specifically at improving these skills be continued.

DAVIS AUDITORY PERCEPTION SCAN:

The DAPS instrument provides information for evaluation in auditory perception. The verbal score (short term) and sentence score (mid-term) offer indications of skills in reception, memory, recall, sequencing perseveration, word alterations, substitutions, omissions and expression. The comprehension score (long term and retrieval) offers indications of skills in long term reception, filing, storage, memory, recall, and expression.

Data analysis relative to those skills above indicated there were significant differences between the pretest level and post test level in all three areas of auditory perception for the total group of preschoolers (N = 19). The group made significant gains from pretest to post test ($P < .01$) in their verbal (short term), sentence (mid-term), and comprehension (long term) scores. (See Table II).

When the groups were analyzed individually the results indicated the pre-kindergarten group (N = 12) made significant gains from pre to post test in their

verbal, sentence, and comprehension scores ($P < .01$). The kindergartners ($N = 7$) made significant gains in verbal score (short term) and comprehension (long term) ($P < .01$), but not in their sentence score (mid term) ($P > .05$). (See Table II).

It can be concluded from the data analysis that the project was successful in contributing to the improvement of school readiness in auditory perception for preschool participants. For the younger children this is true in all three areas measured (verbal, sentence, and comprehension). For the older preschoolers contributions were evident in only these areas indicated by the verbal and comprehension scores. (See objective 3 previously stated).

It is recommended that effort exerted towards improving auditory perception be continued and activities designed to facilitate this be pursued.

BRYNGELSON PICTURE ARTICULATION TEST:

The BPAT instrument provides information for evaluation in the areas of recognition and naming ability of nouns. This includes visual-verbal-storage circuitry and the expressive aspect of correctly articulating English consonants in the initial, medial, and final positions in words. Both expressive vocabulary and articulation scores are utilized.

Data analysis relative to those skills above indicated there were significant differences between the pretest and post test scores in both areas for the total group of preschoolers ($N = 19$). The group made significant gains from pretest to post test ($P < .01$) in expressive vocabulary and articulation. (See Table II).

When the groups were analyzed individually the results indicated the pre-kindergarten group ($N = 12$) made significant gains from pre to post test in the areas of expressive vocabulary and articulation ($P < .01$). The kindergarten children ($N = 7$) made significant gains in expressive vocabulary ($P < .01$) but not in articulation ($P > .05$). (See Table II).

It can be concluded from the data analysis that the project was successful in contributing to the improvement of school readiness in expressive vocabulary and articulation of project participants. For the younger preschoolers this is true in both areas measured. For the older children participating in the project contributions were evident only in expressive vocabulary. (See objective 3 previously stated).

It is recommended that efforts exerted toward improving expressive vocabulary and articulation facility be continued and readiness activities be incorporated into the existing program.

TABLE II

PRE AND POST TEST COMPARISONS
FOR PRESCHOOL PARTICIPANTS ON
NORTHWESTERN SYNTAX SCREENING TEST (NSST),
DAVIS AUDITORY PERCEPTION SCAN (DAPS) AND BRYNGELSON
PICTURE ARTICULATION TEST (BPAT).

INSTRUMENT	PRE-KINDERGARTEN	KINDERGARTEN	TOTAL GROUP
NSST Receptive Language Score (Syntax)	Pre M = 45.1 s = 15.2 Post M = 60.8 s = 16.3 t-ratio 4.459** change 15.7 N = 12	Pre M = 66.7 s = 9.8 Post M = 81.4 s = 7.9 t-ratio 3.112* change 14.7 N = 7	Pre M = 53.1 s = 17.1 Post M = 68.4 s = 17.0 t-ratio 5.426** change 15.3 N = 19
NSST Expressive Language Score (Syntax)	Pre M = 35.4 s = 27.4 Post M = 61.8 s = 13.6 t-ratio 3.727** change 26.4 N = 12	Pre M = 59.7 s = 8.8 Post M = 72.9 s = 8.8 t-ratio 2.993 change 13.2 N = 7	Pre M = 44.4 s = 25.3 Post M = 65.9 s = 13.2 t-ratio 4.322** change 21.5 N = 19
DAPS Verbal Score (Short Term)	Pre M = 20.2 s = 11.9 Post M = 34.5 s = 10.0 t-ratio 7.330** change 14.3 N = 12	Pre M = 34.6 s = 7.9 Post M = 42.9 s = 8.7 t-ratio 5.398** change 8.3 N = 7	Pre M = 25.5 s = 12.7 Post M = 37.6 s = 10.4 t-ratio 7.994** change 12.1 N = 19
DAPS Sentence Score (Mid-Term)	Pre M = 16.2 s = 21.7 Post M = 41.0 s = 17.4 t-ratio 7.368** change 24.8 N = 12	Pre M = 54.6 s = 10.8 Post M = 59.7 s = 12.8 t-ratio 1.967 change 5.1 N = 7	Pre M = 30.3 s = 26.1 Post M = 47.9 s = 18.3 t-ratio 5.502** change 17.6 N = 19
DAPS Comprehension Score (Long Term & Retrieval)	Pre M = 20.8 s = 13.5 Post M = 31.8 s = 12.2 t-ratio 2.832* change 11.0 N = 12	Pre M = 41.7 s = 18.9 Post M = 60.3 s = 7.4 t-ratio 3.756** change 18.6 N = 7	Pre M = 28.5 s = 18.7 Post M = 42.3 s = 17.4 t-ratio 4.353** change 13.8 N = 19
BPAT Expressive Vocabulary	Pre M = 71.5 s = 10.4 Post M = 85.3 s = 7.5 t-ratio 10.813** change 13.8 N = 12	Pre M = 90.3 s = 3.1 Post M = 94.4 s = 3.1 t-ratio 5.059** change 4.1 N = 7	Pre M = 78.4 s = 12.4 Post M = 88.7 s = 7.6 t-ratio 7.458** change 10.3 N = 19
BPAT Articulation Score	Pre M = 74.3 s = 20.4 Post M = 91.3 s = 9.0 t-ratio 4.026** change 17.0 N = 12	Pre M = 92.0 s = 7.3 Post M = 97.0 s = 2.2 t-ratio 1.850 change 5.0 N = 7	Pre M = 80.8 s = 18.9 Post M = 93.4 s = 7.8 t-ratio 4.007** change 12.6 N = 19

*Indicates significant difference between means - $P < .05$
**Indicates significant difference between means - $P < .01$

PEABODY INDIVIDUAL ACHIEVEMENT TEST:

Analysis of the PIAT data indicated the project was successful in contributing to the improvement of school readiness in the areas of mathematics and reading recognition of the project participants.

A total of seven (7) of the kindergarten children 5-6 years of age had both pre and post test scores available for analysis. This group of subjects had a mean score for mathematics on the pretest of 10.1 and a mean score for mathematics on the post test of 14.1. This gain of 4.0 raw score points between pretest and post test was significant ($P < .05$). The mean score for reading recognition on the pretest for this group was 12.7 and the mean score for reading recognition on the post test was 19.3. This gain of 6.6 raw score points between pretest and post test was significant ($P < .01$) (See Table III).

It can be concluded from the data analysis that the activities of the project contributed to a significant change in the level of school readiness in both mathematics and reading recognition for the 5-6 year old project participants. (See objective 4 previously stated).

It is recommended that the project continue to provide those activities indicated to be effective in fostering readiness skills in the kindergarten participants. It is also recommended that the Peabody Individual Achievement Test be used to assess readiness skill development in the new project year.

TABLE III
PRE AND POST TEST COMPARISONS
FOR KINDERGARTEN PARTICIPANTS ON
PEABODY INDIVIDUAL ACHIEVEMENT TEST (PIAT)

GROUP	PIAT MATHEMATICS	PIAT READING RECOGNITION
Kindergarten 5-6 Years Old	Pre M = 10.1 s = 2.6 Post M = 14.1 s = 2.0 t-ratio 3.400* change 4.0 N = 7	Pre M = 12.7 s = 3.0 Post M = 19.3 s = 4.6 t-ratio 7.922** change 6.6 N = 7

*Indicates significant difference between means - $P < .05$
**Indicates significant difference between means - $P < .01$

BUTLER EVALUATION INSTRUMENT:

Analysis of the Butler Evaluation Instrument data indicated the project was successful in contributing to the improvement of the social relation's skills for preschool participants.

The Butler Evaluation Instrument provides information for evaluation in the areas of self-concept, other people, physical environment, world of ideas, and total or composite social relation's skills.

Data analysis relative to those skills or relations presented above indicated there were significant differences between the pretest level and post test level in all areas for the total group of preschoolers (N = 19). The group made significant gains from pretest to post test ($P < .01$) in the areas of self-concept, other people, physical environment, world of ideas, and total or composite. (See Table IV).

When the groups were analyzed individually the results indicated the pre-kindergarten group (N = 12) made significant gains from pre to post test in all areas including self concept, other people, physical environment, world of ideas, and total or composite ($P < .01$). The kindergarteners (N = 7) did not make significant gains from pre to post test in the area of self concept. However, significant gains were made in the areas of other people, physical environment, world of ideas, and total or composite ($P < .01$). (See Table IV).

It can be concluded from the data analysis that the project was successful in contributing to the improvement of the social relations skills of preschool participants. For the younger preschoolers this is true in all of the areas measured. For the older preschoolers contributions were evident in all of the areas except self concept. (See objective 5 previously stated).

It is recommended that efforts exerted toward improving social relations skills be continued and activities aimed specifically at improving the skills of the Butler Instrument be continued.

TABLE IV

PRE AND POST TEST COMPARISONS
FOR PRESCHOOL PARTICIPANTS ON
BUTLER TEST

INSTRUMENT	PRE-KINDERGARTEN	KINDERGARTEN	TOTAL GROUP
Butler Test Self-Concept	Pre M = 2.8 s = .7 Post M = 3.5 s = .7 t-ratio 3.548** change .7 N = 12	Pre M = 2.8 s = .6 Post M = 3.5 s = .6 t-ratio 1.962 change .7 N = 7	Pre M = 2.8 s = .7 Post M = 3.5 s = .7 t-ratio 3.855** change .7 N = 19
Butler Test Other People	Pre M = 2.3 s = .7 Post M = 3.7 s = .6 t-ratio 8.341** change 1.4 N = 12	Pre M = 2.9 s = .6 Post M = 3.7 s = .6 t-ratio 3.713** change .8 N = 7	Pre M = 2.5 s = .7 Post M = 3.7 s = .6 t-ratio 8.100** change 1.2 N = 19
Butler Test Physical Environment	Pre M = 2.4 s = .7 Post M = 3.5 s = .6 t-ratio 10.411** change 1.1 N = 12	Pre M = 3.1 s = .4 Post M = 4.1 s = .4 t-ratio 5.075** change 1.0 N = 7	Pre M = 2.6 s = .7 Post M = 3.7 s = .6 t-ratio 10.727** change 1.1 N = 19
Butler Test World of Ideas	Pre M = 2.1 s = .6 Post M = 3.5 s = .7 t-ratio 15.875** change 1.4 N = 12	Pre M = 2.7 s = .3 Post M = 4.0 s = .4 t-ratio 8.926** change 1.3 N = 7	Pre M = 2.3 s = .6 Post M = 3.6 s = .6 t-ratio 17.377** change 1.3 N = 19
Butler Test Total Score	Pre M = 2.3 s = .6 Post M = 3.6 s = .6 t-ratio 11.963** change 1.3 N = 12	Pre M = 2.8 s = .4 Post M = 3.8 s = .3 t-ratio 5.641** change 1.0 N = 7	Pre M = 2.5 s = .6 Post M = 3.7 s = .5 t-ratio 12.017** change 1.2 N = 19

*Indicates significant difference between means - $P < .05$
**Indicates significant difference between means - $P < .01$

PARENT AS A TEACHER QUESTIONNAIRE:

The Parent As A Teacher (PAAT) instrument was selected primarily to assess the effectiveness of the "Outreach To Parents" component of the project.

Since the parents and parent surrogates were involved in discussion group/workshop activities, The PAAT instrument provides an assessment of project impact upon this group. The data provided by this instrument offers an indication as to the effect of parental involvement in the classroom as aides. Also, the impact of PIP activities can be assessed by this instrument, and finally the effect children involved in the project have upon their parents. This would assume that these preschool children can modify their parents' or parent surrogates' attitudes and behaviors by interacting with them following their preschool experiences.

The PAAT instrument is designed to measure parental child rearing attitudes. The PAAT provides information for evaluation relative to child rearing attitudes in the areas of creativity, frustration, control, play, teaching-learning and a total or composite measure.

A total of twelve (12) parents or parent surrogates completed the PAAT instrument on a pre - post basis. This data was subjected to analysis again using a correlated t-test to compare pre and post test means. The results indicated that there was no significant differences between pre and post test means in all areas tested by the PAAT ($P > .05$). It is worthy of note, however, that a score of 2.5 or above would be considered desirable on the PAAT and these parents or parent surrogates had desirable attitudes toward all of these child rearing practices at the time of pretesting and at the time of post testing. (See Table V). The twelve parents completing the PAAT on a pre - post basis represented 6 parents or parent surrogates of children 3 to 6 years or those children participating in the preschool program. Six (6) of these parents or parent surrogates represented children from infancy to age 3, or those children participating in the Parent Infant Program.

The analyses contained in Table V is for the 12 parents or parent surrogates completing both pre and post tests. No significant differences were found between pre and post test means. Analyses of the separate groups of 6 and 6 parents respectively, are also indicated.

The number of parents completing the PAAT instrument on a pre - post basis was small and, it is difficult to draw any conclusions relative to the effectiveness of the project in modifying those child rearing attitudes measured by the PAAT. Also, parent participation in activities directly related to those behaviors measured by the PAAT instrument is difficult to assess. However, data analysis would suggest that project activities have not altered existing child rearing attitudes of those parents completing both pre and post tests. (See objective 6 previously stated).

It is recommended that efforts be exerted toward continuing parental

involvement in the project. It is also recommended that objectives relating to parental involvement be reevaluated and rewritten. Consideration must be given to specific acceptable indicators of project impact on parental behaviors. When these behaviors have been identified, then they must be operationally defined. Once this is completed, objectives developed will be more valid and can be evaluated. This process may necessitate the development of new instruments. Thus, reevaluation of the parental involvement component of the project needs to be started very soon.

TABLE V

PRE AND POST TEST COMPARISONS
OF PARENT RESPONSES ON THE PAAT

INSTRUMENT/SUBTEST	PRESCHOOL PARENTS N = 6	PIP PARENTS N = 6	TOTAL GROUP N = 12
PAAT CREATIVITY	Pre M = 2.7 a. s = .2 a. Post M = 2.7 s = .3 t-ratio = .444 change = 0	Pre M = 2.7 s = .1 Post M = 2.7 s = .2 t-ratio = .480 change = 0	Pre M = 2.7 s = .2 Post M = 2.7 s = .3 t-ratio = .198 change = 0
PAAT FRUSTRATION	Pre M = 2.7 s = .2 Post M = 2.9 s = .3 t-ratio= 1.184 change = .2	Pre M = 2.7 s = .2 Post M = 2.7 s = .2 t-ratio= .552 change = 0	Pre M = 2.7 s = .2 Post M = 2.8 s = .3 t-ratio= .653 change = .1
PAAT CONTROL	Pre M = 2.8 s = .3 Post M = 2.8 s = .2 t-ratio= .466 change = 0	Pre M = 2.8 s = .4 Post M = 2.6 s = .1 t-ratio= 1.574 change = -.2	Pre M = 2.8 s = .3 Post M = 2.7 s = .2 t-ratio= 1.431 change = -.1
PAAT PLAY	Pre M = 2.9 s = .1 Post M = 3.0 s = .3 t-ratio= .101 change = .1	Pre M = 2.9 s = .2 Post M = 2.9 s = .2 t-ratio= .480 change = 0	Pre M = 2.9 s = .2 Post M = 2.9 s = .3 t-ratio= .092 change = 0
PAAT TEACHING-LEARNING	Pre M = 2.9 s = .2 Post M = 3.2 s = .3 t-ratio= 2.113 change = .3	Pre M = 2.9 s = .2 Post M = 2.9 s = .4 t-ratio= .105 change = 0	Pre M = 2.9 s = .2 Post M = 3.0 s = .4 t-ratio= 1.143 change = .1
PAAT TOTAL	Pre M = 2.8 s = .2 Post M = 2.7 s = .2 t-ratio= 1.134 change = -.1	Pre M = 2.8 s = .2 Post M = 2.8 s = .2 t-ratio= 2.191 change = 0	Pre M = 2.8 s = .2 Post M = 2.7 s = .2 t-ratio= 1.777 change = -.1

*Indicates significant difference between means - $P < .05$ a.M & s rounded to nearest tenth.

PARENTAL INVOLVEMENT:

Parental involvement in the project centered around their work within the preschool classrooms as parent aides, participation in discussion group/ workshops, within the PIP component, on the Parent Advisory Committee, Parent-Teacher conferences, special evening meetings, and in re-assessment of the preschool program.

Perhaps the greatest incentive for participation of parents is being offered through the PIP Component. The PIP segment includes a playschool conducted once, and later in the year twice, a week for one and one-half hours (9:30-11:00 A.M.). During the playschool opportunities were provided for the young children to build social skills in interacting with other children. Activities of the playschool included: free play, mother/child activity, snack, speaker or information session, filmstrips or movies, and a parental discussion group.

A total of 30 playschool sessions were conducted during the project year. A total of twenty-three (23) parents and children 0-3 years of age were available to participate in these sessions. Of this number (23) a total of 18 or 78.3% participated in at least one session. The average number of sessions attended by the 18 attendees was 8.1, and they ranged from 1 to 23 sessions attended.

A second aspect of the PIP component was the teenage or parents-to-be meetings held biweekly. A total of 34 tribal members were identified as potential parents. A total of 32 of these tribal members or 94.1% attended (the eight meetings scheduled) at least one of the sessions scheduled during this project year. The average number of sessions attended by the 32 attendees was 5, and they ranged from 1 to 8 sessions attended.

The third part of the PIP component included home-visits scheduled at the parent's convenience on a formal basis. Many of the home visits were conducted during the evening. Also, parent discussion meetings were held at night and were open to all parents. Periodically parent surrogates participated in home-visits on an informal basis. During home-visits efforts were exerted to generate an awareness of child development skills for parents. The working characteristics of reservation parents, many work during the day or irregular hours, makes participation difficult for these individuals.

An attempt was made during this project year to solicit tribal member input into project development and reassessment. The project, objectives of present program and components, was reviewed with parents and the community at a general tribal meeting designed to familiarize them with the project. Following this general meeting, the Parent Advisory Committee (PAC) was asked to prioritize important and desirable characteristics of the project. The existing staff was also asked to list their priorities. A general inservice meeting of staff and PAC along with mailings to tribal members and parents provided the basis for an appointed committee to bring together priorities established through the involvement process. What evolved from the process described was a designation of the importance of: preparation of children for formal education, parent education, and building the children's self-esteem.

SECTION IV

SUMMARY COMMENTS

During this fifth year of the project the preschool classroom laboratory has been continued and expanded. Inservice training was conducted. Home visits with each participant and parent were held prior to the beginning of school. Children were eased into the program gradually to permit adaptation and adjustment to take place. The total program was structured so that language development was stressed with the younger children using Peabody Language Development materials. In the kindergarten development in the readiness areas was stressed using the Lippencott Readiness Programs. This structure is conducive to preschool children's development.

Parents were involved in many ways in this project. Their involvement continues to be active through the Pre-school Parent Association formed early in the project year. Parents were involved throughout the project year as classroom aides, and in parent discussion workshops, the PIP segment, and reassessment tribal and staff meetings. An excellent system of communications with the community was established.

Objectives and activities were pursued relative to each of the project components. These objectives and activities related to the outreach to parents, family counseling, involvement of tribal elders and historians and curriculum development were modified only when it was found to be necessary. The original proposal in establishing multiple components was indeed ambitious and the tenacity of the project staff in attempting to fulfill the intent of each of the components is indeed praiseworthy.

Data analyses following this fifth year of the project indicated that the project was effective in contributing to or modifying the behavior of the preschool children in the areas of social skills and readiness skills, motor skills, language skills, and social relations skills. There was no indication of the project's effectiveness in modifying or changing parents' attitudes toward those child rearing practices measured by the PAAT instrument utilized.

It is recommended that the program embodying many components be re-evaluated and rewritten for the sixth year. The preschool program implemented during the fifth year has yielded good results for the preschool children and should be implemented with those revisions and modifications found to be beneficial for skill development of the preschoolers. Other components of the project need to be rewritten with new objectives and new behaviors identified. Program modifications can then be made with new direction and activities related to the new objectives.

Much has been accomplished during this year and indications are that even greater results could be expected during the next project year.